What is Claimed is:

1. A method of reducing the nicotine content of a tobacco plant, said method comprising:

applying to the tobacco plant an effective amount of a nicotine reducing agent sufficient to inhibit the synthesis of nicotine in the tobacco plant so that the resulting nicotine content in the plant treated with the nicotine reducing agent will yield a non-addictive level of nicotine in the central nervous system blood plasma of the user.

2. The method of claim 1 comprising treating the tobacco plant in situ.

3. The method of claim 1 wherein the nicotine reducing agent is selected from the group consisting of glucose oxidase, gluconic acid, hydrogen peroxide and combinations thereof.

4. The method of claim 3 wherein the nicotine reducing agent is glucose oxidase.

5. The method of claim 4 wherein the glucose oxidase is produced by a tobacco plant herbivore.

6. The method of claim 5 wherein the tobacco plant herbivore is Helicoverpa zea.

7. The method of claim 4 wherein the nicotine reducing agent is biochemically produced.

8. The method of claim 1 comprising applying to the tobacco plant a nicotine reducing composition comprising an effective amount of a nicotine reducing agent and a carrier.

9. The method of claim 8 wherein the composition is selected from an aqueous solution and a salivary extract of a tobacco plant herbivore.

10. The method of claim 8 wherein the effective amount of the nicotine reducing agent is in the range of 2 to 200 grams per 55 gallons of the nicotine reducing composition.

11. The method of claim 10 wherein the effective amount of the nicotine reducing agent is 20 to 100 grams per 55 gallons of the nicotine reducing composition.

12. The method of claim 1 wherein the non-addictive nicotine level of nicotine is less than 25 ng/ml in central nervous system blood plasma.

13. The method of claim 3 wherein the non-addictive level of nicotine is less than 5 ng/ml in central nervous system blood plasma.

14. The method of claim 1 wherein the tobacco plant is selected from the group consisting of Nicotiana tabacum, Nicotiana rustica and Nicotiana glutinosa.

15. The method of claim 1 wherein the tobacco plant is a genetically modified plant, exhibiting a reduced level of nicotine as compared to non-genetically modified tobacco plants.

16. The method of claim 1 comprising applying the nicotine reducing agent directly to an exterior of a portion of the tobacco plant.

17. The method of claim 1 further comprising damaging the tobacco plant prior to applying the nicotine reducing agent.

18. The method of claim 1 comprising applying to the tobacco plant a tobacco plant herbivore and generating conditions on said tobacco plant which result in the tobacco plant herbivore emitting onto the tobacco plant the nicotine reducing agent.

19. The method of claim 18 wherein the tobacco plant herbivore is Helicoverpa zea.

20. The method of claim 1 further comprising repeating the administration of the nicotine reducing agent to sequentially lower the level of nicotine to the non-addictive level.

21. A tobacco plant treated in accordance with the method of claim 1.

22. Tobacco plant leaves having a nicotine content such that a tobacco product produced from the tobacco plant leaves will yield a non-addictive level of nicotine in the central nervous system blood plasma of the user.

23. The tobacco plant leaves of claim 22 wherein the non-addictive level of nicotine is less than 25 ng/ml in the central nervous system blood plasma.

24. The tobacco plant leaves of claim 22 wherein the non-addictive level of nicotine is less than about 5 ng/ml in the central nervous system blood plasma.

25. The tobacco plant leaves of claim 22 is selected from the group consisting of Nicotiana tabacum, Nicotiana rustica and Nicotiana glutinosa.